Digital Monitoring System

Starter’s Guide

DM1440

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FCC COMPLIANCE STATEMENT

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuit to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However there is no Guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna increases the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to switch the receiver is connected
- Consult the dealer or an experienced radio or television technician for help

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesired operation

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Because our products are subject to continuous improvement, SVC reserves the right to modify product design and specifications without notice and without incurring any obligation. E &O.E.

3.3.4 Setting Up The Camera Configuration Of Local PC

DMRS allows user to setup or change the **camera configuration** of Local PC when user is in **remote site**.

Please check chapter **3.3.3** to **Setup Connection Device** for local and remote PC.

NEED ASSISTANCE

Should you need more information that was not found in this manual you can reach our automated support services 24 hours a day, every day. The services contain the most up to date information about our products. You can access installation instructions, trouble shooting information and general product information.
Our website is: www.strategicvista.com

TECHNICAL SUPPORT

There are 2 options available for technical support:

- Online Option: Please visit our website at www.strategicvista.com for free technical assistance anytime.
- Telephone Support: Should you need to talk to a DMRS technician, you may access our telephone support line. This service is provided free for the first 90 days. Call toll free 1-877-304-3226.

1 Introduction

1.1 System Overview

Now you can easily turn your PC into a video security monitoring system with the Lorex Digital Monitoring System. The Lorex Capture Card and DMRS Application software allows you to view up to four locations simultaneously on your PC to monitor and protect your business, office of home. By loading the software on a second PC, you can now access the camera image remotely for total security protection.

If movement is detected when using the motion sensor option, an alarm will sound to alert you of potential trouble. With Lorex Digital Monitoring System, you can program your system to automatically call the telephone, cell phone or pager number, which you have designated or digitally record the picture to the PC's hard drive. View, setup and configure the video security cameras from a remote computer location with TCP/IP or modem dial up option to monitor and protect your business or home from across the hall or around the world.

1.2 Minimum System Requirements

Pentium II 350 MHZ processor or faster
64 MB RAM memory
Windows 98/ ME
16 Bit or Higher VGA Card
36,000 bps or faster voice modem
800 x 600 High color Display
8 bit or higher PCI sound Card
CD Rom Drive required for software installation

1.3 System Contents

System Includes:
Four Port Video Capture Card
Owners Manual
DMRS 1.4 Application Software
Quick Setup Guide

1.4 Video Image

- **Size of video**
  – 320*240 pixels per video window
- **Colors**
  – High Color (16 bit)
- **Video compresion type**
  – JPEG + Proprietary algorithm
- **Frame rate of displaying video image**
  – 5 fps (frames per second

- **Frame rate of saving video image**
  – 4 fps
- **Frame rate of transmitting video image**
  – 1 fps for 33600 bps Modem
  – 4 fps for Network

2 INSTALL DMRS SOFTWARE

1. UNPACK SYSTEM CONTENTS

Remove the contents contained in your system.

DMRS 1.4
Application Software

Starter's Guide

2. AUDIO/VIDEO DRIVER INSTALLATION

1. Carefully open cover of the computer, and slide the capture card into any of the PC's slot. Close the cover and start the computer
2. When the computer is on it will prompt a message as per below:

Add New Hardware Wizard
This wizard searches for new drivers for:
PCI Multimedia Video Device
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

- **Network Option**

1. LOCAL SITE SETUP

*(**Note**: This has to be done at the local PC with DMRS Main program.)*

a. Click the **Hammer** icon to enter **"ProgramConfiguration"** dialog box under **DMRS Main application**.

b. Check **"Open Remote Control Function"**.

c. Select **Network** as your connection device from the drop-down list.

d. Click the

button to save your settings and exit Program Configuration dialog box.

CONNECTION:

Click the connection icon to view the picture from the remote location.

The user should make sure that the settings on the Local PC matches the setting given below.

2. REMOTE SITE SETUP:

a) Click the **Hammer** icon to enter DMRS Client dialog box.

b) Check on **TCP/IP** option.

c) Enter the **Local PC IP Address** given by the **ISP** (Internet Service Provider).

d) Enter your password if the did setup password at the local PC (refer to section 3.1.3.D).

***Note**: The password entered here must be exactly the same with that you entered on the local PC password, or your access will be denied.*

e) Click the

button to save your settings and exit DMRS Client dialog box.

Modem Dial Up Option

1. LOCAL SITE SETUP:

*(**Note:** This has to be done on the local PC with DMRS Main program)*

a) Click the **Hammer** icon to enter the **"Program Configuration"** dialog box.

b) Check **"Open Remote Control Function"**.

c) Choose **"Modem"** from the drop down list.

d) Click the

button to save your setting and exit **"Program Configuration"** dialog box.

***Note**: We highly recommend user to use external modem instead of internal modem.*

2. REMOTE (CLIENT) SITE SETUP:

a) Click the **Hammer** icon to enter DMRS Client dialog box.

b) Check on **Modem** button.

c) Choose your modem model from the drop down list.

d) Enter the local PC's telephone number.

e) Enter your password. *(**Note**: This safety feature is prompted only if this safety feature was set – refer to section 3.1.3 D.) **Note**: The password entered here must be exactly the same with that you entered on the local PC password, or your access will be denied.*

f) Click the

button to save these settings and exit DMRS Client dialog box.

CONNECTION:

Click the connection icon to view the picture from the remote location.

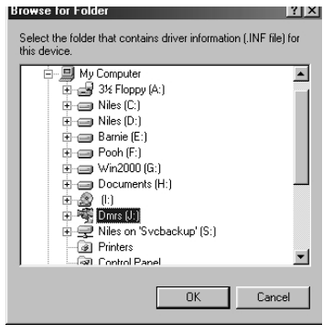
The user should make sure that the settings on the Local PC matches the setting given below.

3. Insert the supplied DMRS 1.4 application software CD into the CD-Rom drive and click **Next**. The following window will appear:

Add New Hardware Wizard
What do you want Windows to do?
Search for the best driver for your device. (Recommended).
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

4. Click **Next** to proceed to the Add New Hardware wizard screen.

5. Click on the browse button. Select the CD-Rom drive location and click **OK**. DMRS will load the video drivers to your hard drive.



6. Click the **Finish** button. Proceed to the next screen.

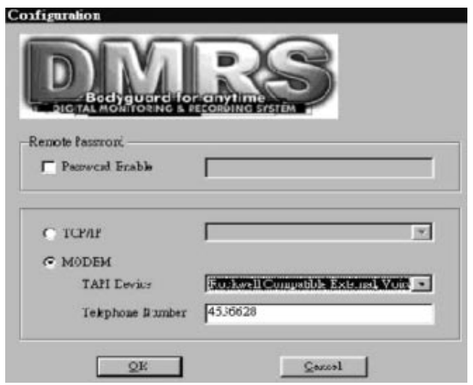
7. The following screen will appear. Click on the **Next** button to continue loading the necessary drivers.

8. Continue the installation procedure by clicking the **Next** button until the Finish option appears. Click the **Finish** button. You have now completed the required driver installation for DMRS.

3.3.2 Main menu of DMRS Client application

Icon	Functional Description
	Click to start the connection. Once connected, you can view live video from the remote PC.
	Click to cut off connection between Local & Remote PC.
	Click this icon to close your DMRS Client application down. You can also click the icon to shut down this application.
	Click to open the DMRS Client configuration box.

3.3.3 Setup Connection Device Using Modem



3.3 DMRS Client

This module allows the user to remotely view the camera location using standard dial up or Network connection. The user has the option to change the DMRS functions from the remote site location. Before continuing, please make sure the local and remote PC are connected to the Modem or Network.

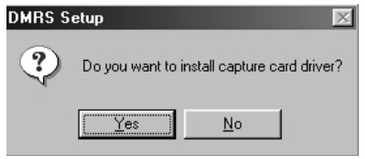
3.3.1 Run DMRS Client

To run **DMRS Client**: Go the **Start > Programs > Digital Monitoring and Recording System >** and Click the **DMRS Client**.

3. SOFTWARE INSTALLATION

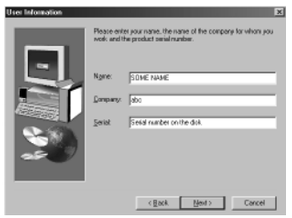
9. Click the **Start** button on your computer's desktop. Click Run in the start up menu and type **setup.exe** followed by the CD-Rom drive letter (d:\setup.exe). Click **OK**.

10. DMRS will ask you if you want to install the capture card driver. Click **YES**.



11. Select the language, which is defaulted to English. Press the **OK** button to continue.

12. Continue with the installation process until prompted for User Information. Enter your name, company (if applicable) and the serial number which is located on the CD envelope.



13. Click the **Finish** button to complete the software installation. The system will restart by itself. DMRS is now ready to use. Connect four video cameras to the Video capture card on your system unit. Run DMRS from the **Start – >Program->Digital Monitoring System– >DMRS Main**.

3 Application Software

There are three main options in the Lorex Digital Monitoring System. A brief explanation regarding each function is outlined in this Starter's Guide. To learn more about these applications, refer to the Help Menu.

- DMRS Main – This is the principle module in the DMRS Software. Use DMRS main to view the camera locally. ***Note****: DMRS Main must be activated in order for DMRS Client to be used.*
- DMRS Viewer – This module allows the user to view a recorded picture saved to the computer's hard drive during alarm recording or continuous recording. DMRS Viewer allows the user to digitally freeze and zoom in on a recorded frame.
- DMRS Client – This module allows the user to remotely view the camera locations using standard dial up modem connection or using TCP/IP. The user has the option to change the DMRS functions from the remote location.

DMRS CLIENT

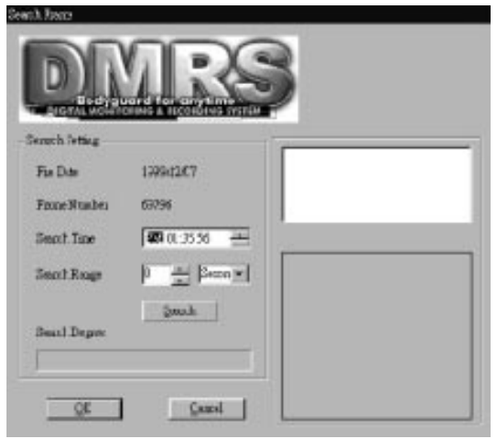
3.2.3 Searching a Recorded file

DMRS allows you to quickly find the video frame at a certain time.

1. Click the **"Search"** icon.

2. Enter the desired time and search range. *(**Note:** The search range can be given in Seconds, Minutes or Hours. If you give 30 minutes as Search range, the DMRS will start searching and shows all video frames recorded during the desired time ± 30 minutes.)*

3. Click the Search icon to start the search process.



***Note**: No image will appear on the screen if nothing was detected during the specified time frame.*

3.2.4 Viewing Options

<F1>: Main Quad Screeing Viewing (with set up icons)
<F2>: Quad Screen Viewing
<F3>: Full Screen Viewing – Camera 1
<F4>: Full Screen Viewing – Camera 2
<F5>: Full Screen Viewing – Camera 3
<F6>: Full Screen Viewing – Camera 4
<F7>: Auto Sequence between four camera locations

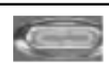
DMRS MAIN

3.1 DMRS MAIN

3.1.1 Main Screen

DMRS is the principle module used in the digital monitoring system. It is used to view cameras locally (e.g. directly connected to the user's PC.). DMRS main must be activated in order for the user to operate DMRS Viewer and DMRS Client.

3.2.2. Remote Control Functions

Icon	Functional Description
	Time, Month, Year Read-out Box.
	Used to open a recorded video file.
	Start the playback of recorded video file.
	Stop.
	Pause the playback.
	Advance to the next video frame.
	Go back to the previous video frame.
	Print the on-screen video frame with time stamp.
	Click to close **DMRS Viewer** application.
	Click this icon to open **Search Setting** dialog box.
	Repeat image sequence.
	Negative image.
	Sharpness.
	Adjust gray colour.

3.2 DMRS Viewer

DMRS Viewer - This module allows the user to view a recorded picture saved to the computer's hard drive during alarm recording. DMRS Viewer allows the user to digitally freeze and zoom in on a recorded frame

3.2.1 DMRS Viewer

To run DMRS Viewer: Go to **Start > Programs > Digital Monitoring and Recording System >** and click on the **DMRS Viewer** .

A. Viewing Digital Image

Follow the following steps to view a video, which has been recorded to your PC's hard drive:

1. Press the "Open" button. Locate the file and press the button. The picture will appear on your screen.

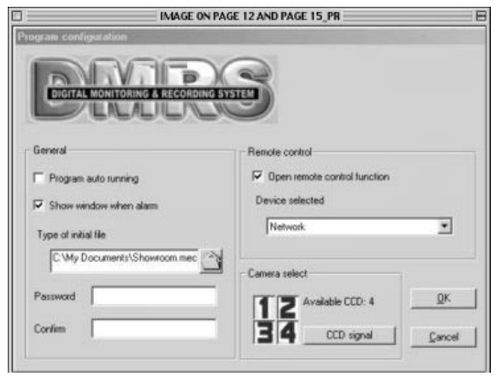
3.1.2 DMRS Main – Icons

Icon	Functional Description
	Used to view software version.
	Used to close **DMRS Main** application. You can also click the icon to exit.
	Used to load in an existing camera configuration file.
	Used to **Save** a camera configuration.
	Used to open the Program Configurationn dialog box to set up a camera, password and to activate the remote control functions.
	Used to open **Camera Settings** dialog box.

3.1.3 Program Configuration

When using Digital Monitoring System for the first time, the user must configure the software settings. Follow the steps indicated below:

Click the **Hammer** icon to open the Program Configuration window.

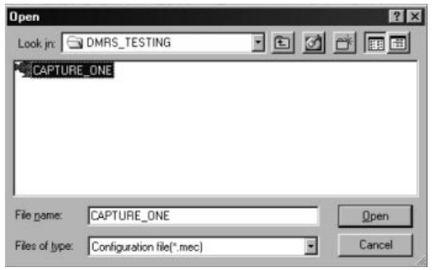


A. Retrieving Camera Setting

> ***Important Note**: When exiting the DMRS Main Screen, the user will need to re-establish the program configuration previously saved. If the user did not save the settings previously, the program settings will have to be recreated.*

1. To retrieve the camera settings, click the **load configuration** icon and select the configuration which you have saved on your PC. Click the

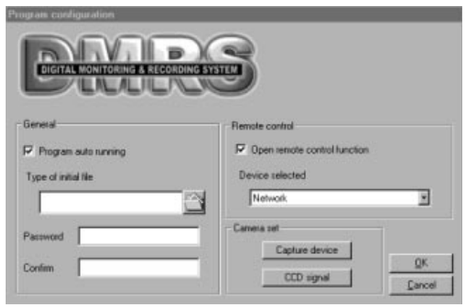
button.



B. Open Remote Control Function

In order to access your computer remotely, the "Open Remote Control Function" should be activated.

1. Check the **'Open Remote Control Function'** box from the DMRS main menu by clicking the **Hammer** button.



DMRS VIEWER

3.1.5 Viewing Options

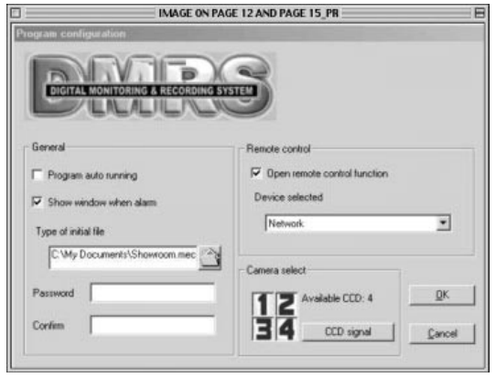
<F1>: Main Quad Screeing Viewing (with set up icons)
<F2>: Quad Screen Viewing
<F3>: Full Screen Viewing – Camera 1
<F4>: Full Screen Viewing – Camera 2
<F5>: Full Screen Viewing – Camera 3
<F6>: Full Screen Viewing – Camera 4
<F7>: Auto Sequence between four camera locations

3.1.6 JPEG Image

DMRS captures images in JPEG format when motion is detected. These jpeg images can be later viewed through DMRS Viewer

2. From the **"DEVICE SELECTED"** drop down list, select the connection device (Modem or Network).

   ***Note**: The connection device selected must be the same as the remote PC. For example, if the user uses standard dial up option, select **"CURRENT MODEM TYPE".** If the user uses LAN connection, select **"NETWORK"**.*



3. Save these settings by clicking the

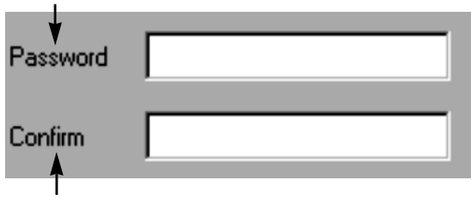
icon. ***Note**: By saving these settings, the user can always re-establish the saved settings even after exiting the Digital Monitoring System.*

4. The user always has the option of saving the program settings to their PC by pressing the button.

C. Password Protection Option

The password protection option is available for the user, which protects your system from unauthorized use.

Enter the Password. Next, confirm the password on the next line.



The password protection option will now be activated every time you enter DMRS Main.

D. Removing Password Option

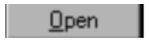
1. From the main screen, click the **Hammer** icon to open the program configuration box.
2. Highlight the letters in the **Password** box and press the delete button from your keyboard.
3. Highlight the letters in the **Confirm** box and press the delete button from your keyboard.

E. Program Auto Run

You have the option to automatically start Digital Monitoring System whenever the user turns on their PC. By default, this feature is disabled.

To activate this feature, proceed as follows:

1. Check on the

button from DMRS Main screen.
2. Use browser to look for **camera configuration** file that you want the system to run every time DMRS is started. Once the file is found, click on 

button.
3. Save these settings by clicking the

icon. ***Note****: By saving these settings, the user can re-establish these setting when exiting the Digital Monitoring System.*
4. The user always has the option of saving the program settings to their PC by the pressing the button.

3.1.4 Advanced Camera Settings

This section will instruct you how to activate various advanced detection and surveillance features.

a. Click the

icon from DMRS main screen.